

IN THE CLAIMS:

1 1. – 9. (Cancelled)

1 10. (Previously Presented) A method for generating a point-in-time restoration of a set of
2 database files and a set of associated log files to an active file system, comprising:

3 selecting, a backup to restore therefrom, the backup comprising a snapshot of a file
4 system including the set of database files, copies of the associated log files and copies of log
5 files associated with a set of snapshots created later in time than the selected snapshot;

6 verifying the selected backup;

7 copying, in response to the backup being successfully verified, the snapshot of the set
8 of database files to the active file system;

9 copying, in response to the backup being successfully verified, the copies of the asso-
10 ciated log files to the active file system; and

11 copying the copies of the log files associated with the set of snapshots created later in
12 time than the selected snapshot to the active file system.

1 11. (Previously Presented) The method of claim 10 wherein the step of selecting the backup
2 to restore from further comprises:

3 a user selecting, from a set of backups to restore from.

1 12. (Previously Presented) The method of claim 10 wherein the step of copying the snapshot
2 to the active file system further comprises:

3 copying contents of a root inode associated with the snapshot to a root inode associ-
4 ated with the active file system.

1 13. (Previously Presented) The method of claim 10 wherein the method further comprises:

2 renaming the copies of the associated log files to a naming convention of a database
3 server.

1 14. – 20. (Cancelled)

1 21. (Original) A computer-readable medium, including instructions executing on a com-
2 puter, for generating a point-in-time restoration of a set of database files and a set of associ-
3 ated log files to an active file system, the program instructions including instructions for per-
4 forming the steps of:

5 selecting, a backup to restore therefrom, the backup comprising a snapshot of a file
6 system including the set of database files, copies of the associated log files and copies of log
7 files associated with a set of snapshots created later in time than the selected snapshot;

8 verifying the selected backup;

9 copying, in response to the backup being successfully verified, the snapshot of the set
10 of database files to the active file system;

11 copying, in response to the backup being successfully verified, the copies of the asso-
12 ciated log files to the active file system; and

13 copying the copies of the log files associated with the set of snapshots created later in
14 time than the selected snapshot to the active file system.

1 22. - 33. (Cancelled)

1 34. (Previously Presented) A method for generating a point-in-time restoration of a database
2 to an active file system, comprising:

3 storing a first snapshot, the first snapshot taken at a first time, the first snapshot in-
4 cluding a set of database files;

5 storing a copy of a first log file, the copy of the first log file associated with the first
6 snapshot, the copy of the first log file including information that had not yet been incorpo-
7 rated into the database files as of the first time;

8 storing a copy of a second log file, the copy of the second log file associated with a
9 second snapshot taken at a second time subsequent to the first time, the copy of the second

10 log file including information received subsequent to the first time that had not yet been in-
11 corporated into the database files as of the second time; and

12 copying the first snapshot, the copy of the first log file, and the copy of the second log
13 file to the active file system, to thereby restore at least a portion of the information received
14 at the database subsequent to the first time without using the second snapshot.

1 35. (Previously Presented) The method of claim 34 further comprising:

2 verifying that the first snapshot, the copy of the first log file, and the copy of the sec-
3 ond log file are not corrupted and are valid.

1 36. (Previously Presented) The method of claim 34 wherein the step of copying further com-
2 prises:

3 copying contents of a root inode associated with the snapshot to a root inode associ-
4 ated with the active file system.

1 37. (Previously Presented) The method of claim 34 wherein the step of copying further com-
2 prises:

3 renaming the copy of the first log file and the copy of the second log file according to
4 a naming convention of the database such that the first log file and the second log file are
5 recognized by the database.

1 38. (Previously Presented) The method of claim 34 wherein the copy of the first log file and
2 the copy of the second log file are stored in directories of the active file system, the directo-
3 ries also storing meta data associated with the snapshots.

1 39. (Previously Presented) A system for generating a point-in-time restoration of a database
2 to an active file system, the system comprising:

3 a storage device configured to store a first snapshot, the first snapshot taken at a first
4 time, the first snapshot including a set of database files, the storage device further configured
5 to store a copy of a first log file, the copy of the first log file associated with the first snap-

6 shot, the copy of the first log file including information that had not yet been incorporated
7 into the database files as of the first time, the storage device also configured to store a copy
8 of a second log file, the copy of the second log file associated with a second snapshot taken
9 at a second time subsequent to the first time, the copy of the second log file including infor-
10 mation received subsequent to the first time that had not yet been incorporated into the data-
11 base files as of the second time; and

12 a processor configured to copy the first snapshot, the copy of the first log file, and the
13 copy of the second log file to the active file system, to thereby restore at least a portion of the
14 information received at the database subsequent to the first time without using the second
15 snapshot.

1 40. (Previously Presented) The system of claim 39 wherein the processor is further config-
2 ured to verify that the first snapshot, the copy of the first log file, and the copy of the second
3 log file are not corrupted and are valid.

1 41. (Previously Presented) The system of claim 39 wherein the processor is further config-
2 ured to copy contents of a root inode associated with the snapshot to a root inode associated
3 with the active file system.

1 42. (Previously Presented) The system of claim 39 wherein the processor is further config-
2 ured to rename the copy of the first log file and the copy of the second log file according to a
3 naming convention of the database such that the first log file and the second log file are rec-
4 ognized by the database.

1 43. (Previously Presented) The system of claim 39 wherein the copy of the first log file and
2 the copy of the second log file are stored in directories of the active file system, the directo-
3 ries also storing meta data associated with the snapshots.

1 44. (Previously Presented) A computer readable medium containing executable program in-
2 structions for generating a point-in-time restoration of a database to an active file system, the
3 executable program instructions comprising program instructions adapted for:

4 storing a first snapshot, the first snapshot taken at a first time, the first snapshot in-
5 cluding a set of database files;

6 storing a copy of a first log file, the copy of the first log file associated with the first snap-
7 shot, the copy of the first log file including information that had not yet been incorporated
8 into the database files as of the first time;

9 storing a copy of a second log file, the copy of the second log file associated with a second
10 snapshot taken at a second time subsequent to the first time, the copy of the second log file
11 including information received subsequent to the first time that had not yet been incorporated
12 into the database files as of the second time; and

13 copying the first snapshot, the copy of the first log file, and the copy of the second log
14 file to the active file system, to thereby restore at least a portion of the information received
15 at the database subsequent to the first time without using the second snapshot.

1 45. – 51. (Cancelled)

1 52. (Previously Presented) A data backup apparatus, comprising:

2 an active file system;

3 a backup including one or more snapshots in communication with the active file sys-
4 tem, the snapshots representing a database at a point in time;

5 metadata associated with each of the snapshots, the metadata in communication with
6 the active file system and including log files which represent changes to the active file sys-
7 tem that occurred before each snapshot was generated but had not been incorporated into the
8 database before the particular snapshot was generated; and

9 a user interface in communication with the active file system, the user interface
10 adapted for selecting a snapshot and log files to restore from associated with the selected

11 snapshot or selecting a snapshot to restore from and all of the log files generated since the
12 selected snapshot was generated.

1 53. (Previously Presented) The apparatus of claim 52 wherein the snapshot includes
2 pointers to blocks of a database.

1 54. (Previously Presented) The apparatus of claim 52 wherein the snapshot includes data
2 of a database.

1 55. (Cancelled)